

No. 8894. Improvement in Saw Handles.*(Perfectionnement des bras de scies.)*

Benjamin F. Moss, John D. Abbott and Andrew M. R. Fitzsimmons, Reading, Mich., U.S., 8th June, 1878, for 5 years.

Claim.—1st. A cross cut saw-handle made of wood composed of the parts B, B¹, B², slotted for the admission of the saw and provided with the plates C, C¹, in combination with the saw and screw cy D. 2nd. A saw handle provided with semi-circular slotted projection B¹ formed on the handle plates C, C¹, and key D, in combination with the adjusting screws c against which the end of the saw bears. 3rd. The plate C provided with the hollow hub or bearing in combination with the tapered screw key D and plate C¹. 4th. A cross-cut saw-handle composed of the handle B, and hand grip B¹, adjustably attached to a saw by means of a key D.

No. 8895. Improvements on Fruit Crates.*(Perfectionnements aux mannes à fruits.)*

Andrew M. Smith, Drummondville, Ont., 8th June, 1878, for 5 years.

Claim.—1st. The folding of crates by means of hinges C. 2nd. The fastening crates by means of strap A and rod B.

No. 8896. Stocking Darning Block.*(Brique pour ravauder les bas.)*

Mitchell N. Ha, Skowhegan, Me., U. S., 8th June, 1878, for 5 years.

Claim.—A darning block A having a semi-spherical head to which is solidly or detachably attached a stem C, turned to a handle shape and recessed to receive a case for storing needles.

No. 8897. Apparatus for Assisting the Combustion of Coal Screenings.*(Appareil pour faciliter la combustion de la poussière de charbon.)*

Joseph H. Killey, Hamilton, Ont., 8th June, 1878, for 5 years.

Claim.—1st. In combination with the furnace of a steam boiler or its equivalent of the apparatus single or double, consisting of the box A, inverted cones C, &c., with air spaces e between them, oil reservoir f and auxiliary cones I, L, for combining steam, air and the gases of volatile hydro-carbon or other light oils, to produce a greater degree of heat to assist the perfect combustion of refuse or inferior coal or other kindred substances. 2nd. In combination with the cone box A, of the auxiliary cones I to assist in the induction of air and the gases of volatile hydro-carbon or other light oils to mix with the steam, and also the lower box A¹ placed a short distance below the upper one and provided with a series of inverted cones similar to the upper one for the purpose of doubling the capacity of the device for steamboilers, &c., where a sufficient pressure could not be had with a single oiler; 3rd. In combination with the cone box A, of the hollow screw rotor A², constructed as shown; 4th. In combination with a steam boiler and a cone box, of the series of tubes B², (longitudinal or vertical as may be) under a boiler as shown.

No. 8898. Improvements on Cultivators.*(Perfectionnements aux cultivateurs.)*

William Silverthorn, Windham, Ont., 10th June, 1878, (Extension of Patent No. 2456,) for 5 years.

No. 8899. Improvements on Gas Apparatus.*(Perfectionnements aux appareils à gaz.)*

Francis G. Tibbitts, Philadelphia, (Assignee of Thaddeus S. C. Lowe, Norristown,) Pa., U. S., 11th June, 1878, (Extension of Patent No. 6475,) for 5 years.

No. 8900. Improvements on Gas Apparatus.*(Perfectionnements aux appareils à gaz.)*

Francis G. Tibbitts, Philadelphia, (Assignee of Thaddeus S. C. Lowe, Norristown,) Pa., U. S., 12th June, 1878, (Extension of Patent No. 6475,) for 5 years.

No. 8901. Improvements on Potato-diggers.*(Perfectionnements aux arrache-potates.)*

Henry Parker, Gananoque, Ont., 13th June, 1878, for 5 years.

Claim.—1st. The revolving drum, having radial fingers E, operating between the bars G, of a sieve on which the soil and potatoes are cast by a scoop H. 2nd. The combination of a sieve, composed of bars G, arranged transversely to the line of draft, and a scoop, H discharging thereon. 3rd. A revolving drum having fingers, clearing the spaces between the bars G, to separate the potatoes from the soil.

No. 8902. Mode and Apparatus for Drying Fish.*(Mode et appareil de séchage du poisson.)*

David H. Tétu, Anticosti, Que., 13th June, 1878, for 5 years.

Claim.—1st. The method of drying fish, &c. by the employment of a vertical spindle frame, having a horizontal table or tables on which the fish, &c. is placed, and rapidly rotated to induce a current of air, whereby drying is facilitated; 2nd. The rotary fish dryer constructed of the spindle A, hub C, radial arm B, props D, rings E, &c. inserted therein, having an annular net work F and a net work covering G, in sections.

No. 8903. Improvements on Force-Pumps.*(Perfectionnements aux pompes foulantes.)*

Andrew J. Hopkins, (Assignee of Henry M. Wyeth,) Richmond, Ind., U.S., 13th June, 1878, for 15 years.

Claim.—1st. The pump cylinder A and side-pipe B, off-set as described, and both cast in one piece, with their opposite ends open. 2nd. The valve and its seats f, made together removable and combined by means of guide ways with cylinder A and pipe B, and held in place by the cylinder-head. 3rd. The disc c of the piston, having circumferential groove c¹ and central boss c² with screw threaded perforation, in combination with the packing ring c³, the disc d having perforation corresponding to the boss, and the piston-rod D having screw threaded end, and a washer d¹.

No. 8904. Improvement in Cooking Ranges.*(Perfectionnement dans les landiers de cuisine.)*

Ell C Frost, Elmira, N. Y., U. S., 13th June, 1878, for 5 years.

Claim.—1st. The heater D provided with radial converging plates E forming air spaces E open at top and bottom, surrounded by frame passages and perforated top plates. 2nd. In combination with an oven, the heater D, situated in the interior of said oven. 3rd. In combination with the oven B and heater D situated in the interior of said oven the range A, surrounding the lower ends of one or two sides of the oven and provided with a flue leading into said heater. 4th. The oven B, provided with the chambers A, heating tank F and heater D.

No. 8905. Improvements in Oil Stoves.*(Perfectionnements dans les poêles à huile.)*

James H. Shaut, Honesdale, N. Y., U. S., 13th June, 1878, for 5 years.

Claim.—1st. The combination of the hinged cap B, the centre portion of which is open to receive the stove body M, with the openings S, and the stove bottom L and the draft openings G around the circumference, said stove body M and cap B forming the space P. 2nd. The perforated disc F with its radial flange H, the gas vent V, in connection with the oil receptacle A and the wick tubes E and casting L, and draft openings I. 3rd. The combination of the top piece u, having the openings x in it with the damper z, and which damper h forms a raised grate. 4th. The opening h¹ in the stove body M.

No. 8906. Improvements in Picture Frames.*(Perfectionnements dans les cadres d'images.)*

Samuel Drayton, Toronto, Ont., 13th June, 1878, for 5 years.

Claim.—The base A, upon which is built or planed marginal strips of moulding filled in between with an inserted design covered with glass, and the corners finished and strengthened in the manner described.

No. 8907. Improvements on Gas Carburetters.*(Perfectionnements aux carburateurs à gaz.)*

James M. Palmer, Cambridge, and Charles A. Shaw, Salem, Mass., U. S., 13th June, 1878, for 5 years.

Claim.—1st. The spiral ducts d d¹ d² and shelves G H, combined to operate with the tank E and an automatic valve mechanism. 2nd. The radial partitions x, in combination with the tank E shelves G H and an automatic valve mechanism. 3rd. The pipe N. 4th. The improved valve mechanism consisting of the perforated plug I, valve k, stem l, rod t and float J. 5th. The improved carburettor consisting of the body A B C (with or without the casing S) tank E shelves G H, ducts d d¹, pipes U V, pipes L M N, plug P, tube z, partitions x and the automatic valve mechanism, combined and arranged to operate as specified.

No. 8908. Improvements in Door Fastenings.*(Perfectionnements dans les fermets des portes.)*

John G. Phillips, Bangor, (Assignee of Charles R. Arnold, Bloomingdale,) N. Y., U. S., 13th June, 1878, (Extension of Patent No. 6830,) for 5 years.

No. 8909. Process and Apparatus for Manufacturing Illuminating Gas.*(Procédé et appareil de fabrication du gaz d'éclairage.)*

Henry W. Adams, Philadelphia, Pa., U. S., 13th June, 1878, for 5 years.

Claim.—1st. A bench of gas retorts A, connected together in reciprocating pairs as B C and D E by the cross-pipes F G placed on their front ends, which project outside of the furnace, and which pipes are provided with valves Z and D¹, steam connections L M N O and nozzles H I and J K, and pipes T¹ U¹ V¹ W¹ for feeding oil into them, the said retorts having their stand pipes placed on their rear ends and within the furnace. 2nd. The aprons B¹ C¹ D¹ E¹, in combination with gas retorts, as B C D E having pipes T¹ U¹ V¹ W¹ for feeding oil into them; 3rd. The nozzles H I and J K, in combination with the pipes F and G, and the retorts B C and D E; 4th. The arrangement of gas retorts in a furnace, with jets of steam discharging into them alternately and in opposite directions, as vehicles to carry the products of a freshly charged retort into a reciprocating one whose charge is red hot, and partially or wholly distilled, and in which they shall be decomposed into fixed gas. 5th. The steam pipes L M in combination with the superheater P and Q, and with the nozzles H I, in the pipe F, and the branch steam pipe N O, in combination with the nozzles J K in the pipe G, all provided with valves V W X Y. 6th. The super heating steam pipes P and Q, arranged in the lower flues of a bench of retorts B C D E, which lead the gases of the furnace to the stack, underneath the lower retorts D E, for the purpose of super heating steam during its passage through them from the boiler to the retorts through the pipes L M by means of the spent heat of the furnace; 7th. The steam pipes R and S, with valves T and U, in combination with the super heater P and Q. 8th. The oil reservoir H¹ provided the pipe I¹, for filling it, the float J¹ for indicating the quantity of oil in it, the safety pipe K¹, and the attached feed pipes L¹ M¹ N¹ O¹ and valves P¹ Q¹ R¹ S¹. 9th. The siphon feed pipes T¹ U¹ V¹ W¹, provided with funnels B¹ C¹ D¹ E¹ and valves X¹ Y¹ Z¹ A¹, in combination with the cross-pipes F G and retorts B C D E, for supplying them with oil or other oleaginous matter. 10th. The stand pipes C¹ D¹ E¹ C² D² E², in combination with the rear ends of the retorts B C D E, for the purpose of causing the gas generated in them and impregnated with any tarry vapours to escape through red hot exit pipes, and to effect a more perfect decomposition of the tarry vapours, instead of allowing to escape as it is now done, from their front ends which are outside of the furnace and are never hot, and to carry off with it a large amount of tar and ammoniacal water, as secondary products, and lessen the quantity of gas; 11th. The dip pipes K¹ L¹ M¹ N¹, having a series of holes B¹ C¹ D¹ E¹, about three-fourths of an inch in diameter, and half an inch apart, drilled or cast in their sides, about one inch above their lower and open ends, for the purpose of causing the gas to escape from them in small and divided streams, and shoot horizontally in a ring of jets into the fluid which seals their lower ends, and to be more perfectly washed from the fine carbon with which it is so abundantly charged. 12th. The dip pipes K¹ L¹ M¹ N¹, with discharge holes B¹ C¹ D¹ E¹, in combination with the hydraulic main L², having an overflow pipe V², whose lowest